



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0648; Product Identifier 2017-SW-087-AD; Amendment 39-19670; AD 2019-12-15]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.A. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Leonardo S.p.A. (Leonardo) Model AB139 and AW139 helicopters. This AD requires replacing screws installed on the left and right main landing gear (MLG) shock absorber assembly. This AD was prompted by a report that some screws may have been manufactured without meeting specifications. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Leonardo S.p.A. Helicopters, Matteo Ragazzi, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-711756; fax +39-0331-229046; or at <http://www.leonardocompany.com/-/bulletins>. You may review the referenced service

information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0648; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the European Aviation Safety Agency (EASA) AD, the regulatory evaluation, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email david.hatfield@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Leonardo S.p.A. Model AB139 and AW139 helicopters. The NPRM published in the Federal Register on July 19, 2018 (83 FR 34072). The NPRM was prompted by a report that some screws may have been manufactured without meeting specifications. The NPRM proposed to require replacing screws installed on the left and right MLG shock absorber assembly.

We are issuing this AD to address an MLG shock absorber screw that does not meet specifications. This condition could result in failure of the MLG shock absorber, collapse or retraction of the MLG, and subsequent damage to the helicopter.

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2016-0077, dated April 19, 2016, to correct an unsafe condition for Finmeccanica S.p.A. (previously Agusta) Model AB139 and AW139 helicopters if equipped with kit “Increased Gross Weight 6800 kg” part number (P/N) 4G0000F00111 (kit). EASA advises of a manufacturing issue with the standard screws (P/N NAS1351-5H12P) installed on MLG shock absorber assembly P/N 1652B0000-01. According to EASA, a material analysis shows that the MLG shock absorber screws may have a lower fatigue life than the screws used during the certification fatigue tests. EASA states the affected MLG units have been identified by serial number (S/N). EASA also advises that this unsafe condition, if not detected and corrected, could result in failure of the MLG shock absorber, collapse or retraction of the MLG, and subsequent damage to the helicopter and injury to occupants.

To correct this condition, the EASA AD requires replacing each standard screw with a new screw P/N 1652A0001-01 and re-identifying the S/N of each MLG shock absorber assembly that has the new screw installed, and prohibits installing any affected MLG shock absorber assembly unless the screw has been replaced.

Comments

We gave the public the opportunity to participate in developing this final rule, but we did not receive any comments on the NPRM.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to our bilateral agreement with the European Union, EASA has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed except for a minor editorial change to meet current publishing requirements. In the Required Actions paragraph, instances of "Figure 1 to paragraph (a)" have been changed to "Figure 1 to paragraphs (a) and (e)(2)." This minor editorial change is consistent with the intent of the proposals in the NPRM and will not increase the economic burden on any operator nor increase the scope of this AD.

Related Service Information

We reviewed Finmeccanica Bollettino Tecnico No. 139-397, dated April 7, 2016, which contains procedures for replacing the standard screws installed on the left and right MLG assembly and for re-identifying the MLG shock absorber assembly P/N and the MLG assembly S/N.

Costs of Compliance

We estimate that this AD affects 111 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD, based on an average labor rate of \$85 per work-hour.

Replacing the screws on the left and right MLG assemblies requires about 16 work-hours and \$200 for parts, for a total cost of \$1,560 per helicopter and \$173,160 for the U.S. fleet.

According to Finmeccanica's service information, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by Finmeccanica. Accordingly, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the

national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2019-12-15 **Leonardo S.p.A.:** Amendment 39-19670; FAA-2018-0648; Product Identifier 2017-SW-087-AD.

(a) Applicability

This AD applies to Leonardo S.p.A. Model AB139 and AW139 helicopters, certificated in any category, with an Increased Gross Weight 6,800 Kg kit part number (P/N) 4G0000F00111, and with a main landing gear (MLG) assembly with a P/N and serial number (S/N) listed in Figure 1 to paragraphs (a) and (e)(2) of this AD installed.

P/N	S/N
3G3210V00137 or 1650B1000-01 (left hand)	00100 through 01003
	02000 through 02014
3G3210V00237 or 1650B2000-01 (right hand)	00100 through 01016
	02000 through 02017

Figure 1 to Paragraphs (a) and (e)(2)

(b) Unsafe Condition

This AD defines the unsafe condition as an MLG shock absorber screw that does not meet specifications. This condition could result in failure of the MLG shock absorber, collapse or retraction of the MLG, and subsequent damage to the helicopter.

(c) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

(1) Within the following compliance times, replace each screw P/N NAS1351-5H12P installed on an MLG shock absorber with a screw P/N 1652A0001-01. Re-identify the MLG assembly using black permanent ink by marking an “R” at the end of the S/N of the MLG assembly and cover with a transparent coating. For purposes of this AD, a “landing” is counted any time the helicopter lifts off into the air and then lands again regardless of the duration of the landing and regardless of whether the engine is shut down:

(i) For MLG assemblies with 26,800 or more landings, within 100 hours time-in-service (TIS).

(ii) For MLG assemblies with between 22,000 and 26,799 landings, within 300 hours TIS or before the MLG assembly accumulates 27,200 landings, whichever occurs first.

(iii) For MLG assemblies with less than 22,000 landings, within 1,200 hours TIS or before the MLG assembly accumulates 23,200 landings, whichever occurs first.

(2) After the effective date of this AD, do not install an MLG assembly with a P/N and S/N listed in Figure 1 to paragraphs (a) and (e)(2) of this AD on any helicopter unless the screw has been replaced and the MLG assembly re-identified as described in paragraph (e)(1) of this AD.

(f) Special Flight Permits

Special flight permits are prohibited.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(h) Additional Information

(1) Finmeccanica Bollettino Tecnico No. 139-397, dated April 7, 2016, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Leonardo S.p.A. Helicopters,

Matteo Ragazzi, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-711756; fax +39-0331-229046; or at <http://www.leonardocompany.com/-/bulletins>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

(2) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2016-0077, dated April 19, 2016. You may view the EASA AD on the Internet at <http://www.regulations.gov> in Docket No. FAA-2018-0648.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 3200, Landing Gear System.

Issued in Fort Worth, Texas, on June 19, 2019.

James A Grigg,

Acting Deputy Director for Regulatory Operations,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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